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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/593,647

06/13/2000

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12/29/2005

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EXAMINER

CRAIG, DWIN M

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,647

Applicant(s)

HAGENBUCH ET AL.

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/17/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are presented for reconsideration in view of the amended claim language and Applicants' Request for Continued Examination under 37 CFR 1.114. Claims 7-10 are presented for Examination based on Applicants' Request for Continued Examination under 37 CFR 1.114.

Response to Arguments

2. Applicants' arguments presented in the 6/23/2005 have been fully considered. The Examiner's response is as follows.

2.1 Regarding the 35 USC § 112 2nd paragraph rejection of claim 1 is withdrawn. The Examiner notes that in the following case, Ex parte EASTWOOD, BRINDLE, AND KOLB. 163 USPQ 316, (BdPatApp&Int 1969). The court clearly stated "the descriptive word "about" is not indefinite as argued by the Examiner. It's meaning is not as broad and arbitrary as contended by the Examiner. Rather, the term is clear but flexible and is deemed to be similar in meaning to terms such as "approximately" or "nearly"."

2.2 As regards the 35 USC § 103(a) rejections of claims 1 and 2 Applicants' persuasively argued the merits of the claims in light of the prior art references applied and the Examiner withdraws the previously applied rejections.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 1, 2 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.1 As regards independent claim 1 the following limitation is indefinite, "*sidewalls are placed relatively wider than conventional dump bodies of similar volumetric capacity,*". The

Examiner notes the following from section 2173.05(b) of the MPEP,

The term "similar" in the preamble of a claim that was directed to a nozzle "for high-pressure cleaning units or similar apparatus" was held to be indefinite since it was not clear what applicant intended to cover by the recitation "similar" apparatus. Ex parte Kristensen, 10 USPQ2d 1701 (Bd. Pat. App. & Inter. 1989). A claim in a design patent application which read: "The ornamental design for a feed bunk or similar structure as shown and described." was held to be indefinite because it was unclear from the specification what applicant intended to cover by the recitation of "similar structure." Ex parte Pappas, 23 USPQ2d 1636 (Bd. Pat. App. & Inter. 1992).

Clarification and Amendment are required.

3.2 As regards independent claim 2 and dependent claims 7-10 the following limitation is indefinite, "*the volume of the three dimensional volumetric model is substantially similar to the desired volumetric capacity.*" The Examiner respectfully directs the Applicants' to section 2173.05(b) of the MPEP, *please see section 3.1 of this Office Action.*

Clarification and Amendment are required.

Allowable Subject Matter

4. Claims 1-10 are allowed over the prior art of record.

4.1 The following is a statement of reasons for the indication of allowable subject matter:

4.2 As regards independent claim 1, the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, "*where the loading bucket*

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has a volumetric capacity that is approximately $\frac{1}{4}$ or more than the volumetric capacity of the dump body” and “lowering the bucket into the body so that the bucket is approximately centered over a floor of the body”.

4.3 As regards independent claim 2, the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, *“adjusting a set of design parameters of the body until the load center of gravity for the three-dimensional volumetric model of the load is located proximate the desired location for the load center of gravity”* The Examiner notes that the prior art fails to teach or make obvious the three-dimensional modeling of volumetric load and further determining the location of the of the load center of gravity.

4.4 As regards independent claim 3 the following limitations, in combination with other limitations are neither anticipated nor made obvious by the prior art, *“modeling a shape of a load of heaped material in three dimensions, where the shape of the load of heaped material is substantially conical”*.

4.5 Dependent claims 4-6 are allowed for at least the reason that they depend upon an allowed base claim.

4.6 Claims 1, 2 and 7-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US Patent 4,691,792 discloses a method of determining the center of gravity in a dump body (Figure 4), however this reference does not disclose or suggest the three-dimensional modeling of heaped material and in fact teaches using two-dimensional modeling (Col. 3 lines 47-54).

US Patent 6,374,201 discloses a method of modeling heterogeneous medium (Figure 7 and Abstract).

US Patent 5,844,564 discloses a method of creating a 3-D grid to model a body of material (Abstract and Figures 1 & 2).

“STRESS IN SANDPILES” by Kurt LIFFMAN, Myhoung NGUYEN and Paul CLEARLY discloses a method of modeling stresses in piles of sand (heaped material) (pages 83-88).

“The State of the Art in Automation of Earthmoving” by Sanjiv Singh discloses methods of modeling the movement of earthen material (pages 7-18).

5.1 Claims 1, 2 and 7-10 are rejected. Claims 3-6 are allowed.

5.2 This Office Action is Non-Final.

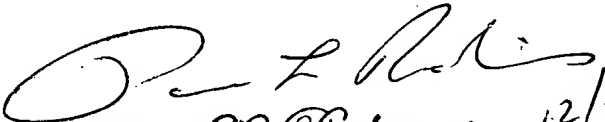
5.3 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC


Paul L. Rodriguez 12/22/05
Primary Examiner
Art Unit 2125